TRANSPORTATION OF BACK INJURIES

To the Editor:

Bell Island is an industrial community with iron ore mines extending several miles under the sea. Any serious accident is examined by trained first-aid personnel and transported by stretcher to the surface and one mile by road to our Surgery. There is no medical examination of the accident until the patient arrives at this surgery. This consists of a small centre with five beds for emergency use, and is not suitable for more than immediate treatment. Any case requiring further care has to be taken to hospital in St. John's, involving a sea passage of two miles and a further journey by road of twelve miles.

It is my view that, if any man suffers a back injury at the mine face, he is better transported in a prone position until the extent of his injuries has been assessed by a physician; but *The St. John's Ambulance Training Manual,* on which the teaching of the first-aid workers here is based, states that they should be placed on the stretcher on their back.

This would seem adequate and advisable in the majority of cases, but, if any fracture dislocation of the lumbar spine is present, this position necessarily increases the danger of cord involvement. Recently such an injury has occurred in the mines here, and I feel that the spinal cord damage may have been lessened by carrying him face downwards on the stretcher. In view of this, it would seem justifiable to suggest that all back injuries should be transported prone.

May I have your comments on this apparent contradiction? JOHN YOUNG, M.D.

Company Surgery,
Dominion Wabana Ore, Limited,
Wabana, Nfld.,
March 27, 1957.

This question was referred to Dr. R. A. Mustard of Toronto, whose reply is reproduced below.

"First of all I should point out that *The St. John's Ambulance Training Manual* to which Dr. Young is referring is probably the '20th edition', which was produced in England by the Parent Society and not written by myself. The book which I produced, *Fundamentals of First Aid,* is still considered supplementary or introductory to the former manual although I believe it will ultimately supplant it. I am taking the liberty of sending Dr. Young a complimentary copy of my book because I think its presentation of the subject of 'broken back' is a considerable improvement over that in the '20th edition'!

"In regard to the question of whether or not spinal injuries should be transported in the prone or supine position, I can only say that it is now generally agreed both by neurosurgeons and by first-aiders in England, the United States, and Canada, that all spinal injuries whether of neck or back be transported lying on their back. The chief reason for this decision, I believe, has been to simplify the management of these cases so that first-aiders will not be faced with the problem of distinguishing 'neck' injuries from 'back' injuries, and, further, to emphasize that the really important point is not the exact position of the patient on the stretcher but the care with which he is handled while he is being placed there. *Fundamentals of First Aid* makes this point quite clear and illustates it by suitable diagrams. It should also be noted that I have advised placing a small pad under the lumbar spine to maintain the normal extension in that area.

"In actual fact some unstable fractures of the lumbar or thoracic spine may dislocate on flexion and others on extension. Moreover, for obese patients the prone position does not necessarily produce extension of the spine! Further, for conscious patients who have to be transported long distances it becomes quite uncomfortable.

"Finally (and this is not for first-aiders!), it is almost certainly true that the vast majority of cord injuries associated with fracture-dislocations of the spine occur at the instant of injury, with only a very few being produced or exacerbated by the movement of the patient consequent upon lifting him from the place of injury on to a stretcher. I think it is safe to say that the exact position on the stretcher is of relatively minor importance."

THE LONDON LETTER

(From our own correspondent)

THE CRISIS

There have been three interesting developments this month in the current controversy between the Government and the British Medical Association. The first is that the Prime Minister has informed the House of Commons that, as an interim adjustment pending the report of the Royal Commission, the Government proposes to increase the remuneration of senior hospital staff, dentists and general practitioners by 5%. Previously he had announced an increase of 10% in the remuneration of junior hospital staff, both medical and dental. The second is that the Royal College of Physicians has decided to co-operate with the Royal Commission, thus taking an entirely different line from the central consultants and specialists committee, the public health committee, and the council of the British Medical Association, which have decided not to co-operate with the Royal Commission in present circumstances. The third is that the general medical services committee of the British Medical Association has asked its chairman, Dr. Talbot Rogers, to resign from the chairmanship of the committee on the grounds that his views do not coincide with those of the committee. To this request, Dr. Rogers has acceded. The difference of opinion is the very fundamental one that Dr. Rogers considers that the Association has "now received from the Royal Commission sufficient assurances to make it possible for us to deploy our arguments and put our whole case before them". The committee, however, is still adamant in its view that the Royal Commission must be boycotted. The reaction of the general medical services committee to the 5% increase is that "since this decision had been made without any discussion or negotiation and was not the result of arbitration, the Government should be requested to place the money in a suspense account."

Canad. M. A. J.
June 1, 1957, vol. 76

The longer the controversy drags on, the more does it bring out the seamy side of nationalized medicine. Principles, ideals, traditions—all are submerged in the sordid wranglings of the market-place.

MASS RADIOGRAPHY RECORDS

Glasgow has broken all records. In a five-weeks' mass miniature radiography campaign, introduced and maintained by all that modern high-power publicity could put into it, more than 712,000 people were x-rayed. On the last day, 46,077 were x-rayed—an all-time world record for a single day. When it is realized that there were only 30 x-ray units in action, the magnitude of the task can be imagined. It is not surprising to learn that on this last day—as on many previous ones—the tubes became so overheated that cold wet towels had to be wrapped round them. It is reported that on the closing day, hundreds were still queuing to be x-rayed at midnight. This magnificent sequel to 18 months' careful planning has definitely put mass miniature radiography on the map, and all concerned are deserving of the congratulations pouring in from all quarters. Preliminary figures suggest that the number x-rayed represent about 87% of the population of the city, and that 1600 active cases of tuberculosis were found. This last figure represents just over 0.2% of the total x-rayed. A further 5000 cases (about 0.7%) are still doubtful, whilst just over 1400 cases (just under 0.2%) had healed lesions.

NUFFIELD COLLEGE OF SURGICAL SCIENCES

Viscount Nuffield's latest benefaction—the Nuffield College of Medical Sciences of the Royal College of Surgeons of England—was officially opened by Lord Freyberg on April 5. The new College, which has accommodation for 80 postgraduate students, has been described as "a unique institution, arising from the desire of Viscount Nuffield and Lord Webb-Johnson to create an All Souls of Surgery". In it, postgraduate students from Commonwealth countries and other parts of the world will gather together for periods of intensive study, with all the academic amenities and scientific facilities of the Royal College of Surgeons at their disposal. They will be able to mix freely, not only with their fellow-students from this country and foreign countries, but also with members of the academic staff of the College and with eminent surgeons of every nationality. The prestige of the new College is enhanced by the fact that it contains a suite of rooms for the President of the Royal College.

SHERRINGTON CENTENARY APPEAL

This is the centenary year of the birth of Sir Charles Sherrington. To commemorate the occasion, the Royal Society of Medicine is proposing to raise a fund to establish a Sherrington Lecture, for the furtherance of knowledge on the nervous system, to be delivered from time to time in the Society's rooms in London. It is felt that many will wish to contribute: both those who were his friends, pupils and colleagues, and those, more numerous, who, as patients, doctors, and scientists, have benefited from his work. Donations should be made payable to the Secretary, the Royal Society of Medicine, 1 Wimpole Street, London, W.1, and cheques marked "Sherrington Memorial".

London, May 1957 WILLIAM A. R. THOMSON

ABSTRACTS *from current literature*

MEDICINE

A Survey of Diabetes in West Cornwall.

C. T. ANDREWS: *Brit. M. J.*, 1: 427, 1957.

West Cornwall is geographically isolated. The area was surveyed to find out how much of a load the diabetic is on the community; that is, the home, the district nurse and the hospital.

Incidence was 5.6 per 1000 population. Approximately 19% of the population is aged 60 or over, as compared with 15% for the rest of the country. Another reason for this high incidence is probably the isolation of the area, with consequent inbreeding. Sex incidence (3 females to 1 male) follows that of England as a whole. Males predominate up to age 40, with a striking increase of females in the sixth and seventh decades.

Less than 50% of patients present with classical symptoms of thirst, polyuria and weight loss, which raises the question of the possible many undiagnosed cases in the community. Problems in the home are constituted by special diet, insulin administration, and intercurrent illness. Of 501 patients investigated, 20% kept a strict diet; 72% observed some restriction and 7.6% observed no dietetic restrictions. Insulin is self-administered by 80% of male patients but only 62.5% of female patients. The female is assisted by her daughter, her husband or the district nurse.

More than three-fourths of the patients attending clinics had no illness requiring rest in bed during the course of a year. The average number of days spent in bed with sickness was 4.9 in 1954 and 4.1 in 1955. The female patient tended to have more illness than the male. Respiratory illness predominated in the home. Diabetes and its complications were responsible for only 15.5% and 13.8% of all days in bed in the two years investigated.

The district nurse visits 15.1% of all diabetic patients in a year and gives daily insulin to about 6.4% of all patients. The general practitioner sees the average diabetic patient 10 times a year. He is consulted by 91% at some time during the year. Of hospital admissions 42.5% were for reasons not connected with diabetes. It is suggested that one bed for every 100 of the diabetic population in Cornwall is required. Cardiovascular disease was responsible for death in more than half of 79 patients followed up. The disease in Cornwall appears to affect the expectation of life in the female but not in the male. The age at death for both sexes was 67.1 years.

LILLIAN A. CHASE

Diagnosis of Arteriosclerotic Aneurysms of the Thoracic Aorta: Report of Six Cases.

I. STEINBERG: *Ann. Int. Med.*, 46: 218, 1957.

In recent years, more and more aneurysms of the thoracic aorta have been due to arteriosclerosis. This is because the incidence of cardiovascular syphilis is declining while life span is increasing. Heretofore, discovery of aortic aneurysms was mostly of academic interest, wiring and cellophane wrapping having been of limited success. Newer surgical techniques, especially excision of the aneurysm and replacement with homologous aortic grafts, promise to be more effective. The early diagnosis of thoracic aortic aneurysm is important; duration of life, once symptoms begin, is apparently limited. Roentgenography fortunately provides a significant clue by disclosing abnormal mediastinal or hilar shadows. If the vascular nature of the lesions is obscure, contrast visualization of the thoracic aorta by angiocardiography will readily establish the diagnosis. This report is concerned with the diagnosis and clinical features during life of arteriosclerotic thoracic aortic aneurysms in six patients.

Arteriosclerotic aneurysms occur in degenerative disease of the thoracic aorta and are a malady of the elderly.